

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

ML 3323

5. Lease Designation and Serial No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

1b. Type of Well

Oil
Well ☐Gas
Well ☒

Other

Single
Zone ☐Multiple
Zone ☐

2. Name of Operator

Tenneco Oil Company

3. Address of Operator

P.O. Box 3249, Englewood, CO 80155

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface
105.34' FNL, 1565.1' FWLAt proposed prod. zone
same

NENW

14. Distance in miles and direction from nearest town or post office*

Approx. 25 miles WNW of Mack, Colorado

15. Distance from proposed*

location to nearest
property or lease line, ft.
(Also to nearest drlg. line, if any)

1075'

16. No. of acres in lease

17. No. of acres assigned
to this well

320

18. Distance from proposed location*
to nearest well, drilling, completed,
or applied for, on this lease, ft.

19. Proposed depth

6060'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

Ground 6713'

22. Approx. date work will start*

Sept., 1981

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
8 3/4"	7" new	23#	+1850'	Circ. to surface
6 1/2"	4 1/2" new	10.5#	+6060'	Cover all productive zones

Set 1-3 joints of 9 5/8" casing as needed to be used as conductor pipe.

See attached drilling procedure

RECEIVED

JUL 31 1981

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 8/14/81

BY: [Signature]

DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed

[Signature]

Title Sr. Production Analyst

Date July 24, 1981

(This space for Federal or State office use)

Permit No.

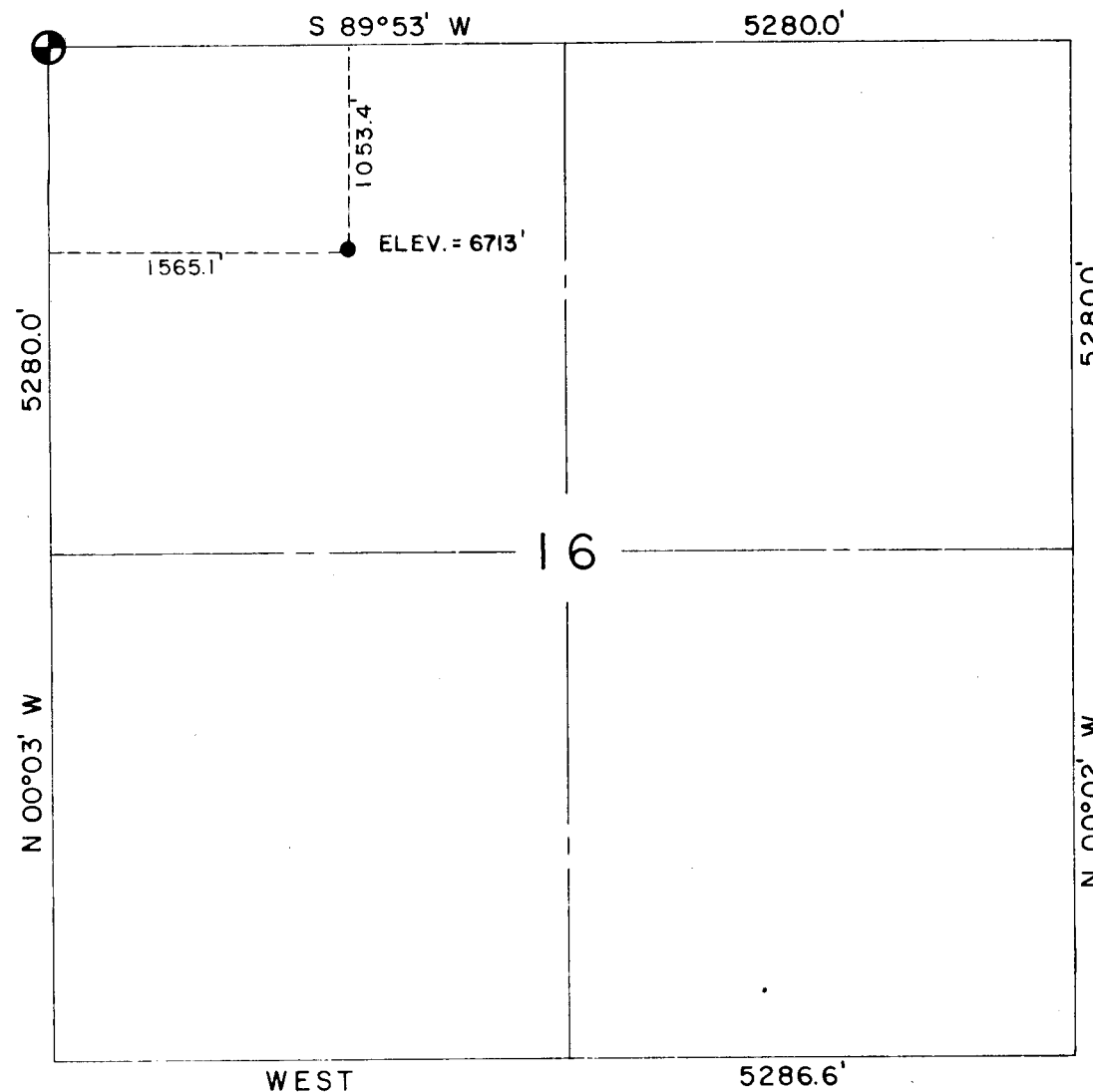
Approval Date

Approved by

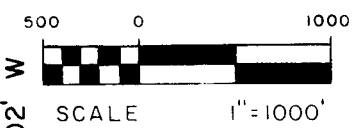
Title

Date

Conditions of approval, if any:



OCT 29 1980



BASIS OF BEARING:
SOLAR OBSERVATION

LEGEND

● FOUND USGLO.
BRASS CAP

WELL LOCATION

1053.4 FT. S.N.L. — 1565.1 FT. E.W.L.
SECTION 16, T. 17 S., R. 24 E., SLB & M
GRAND COUNTY, UTAH

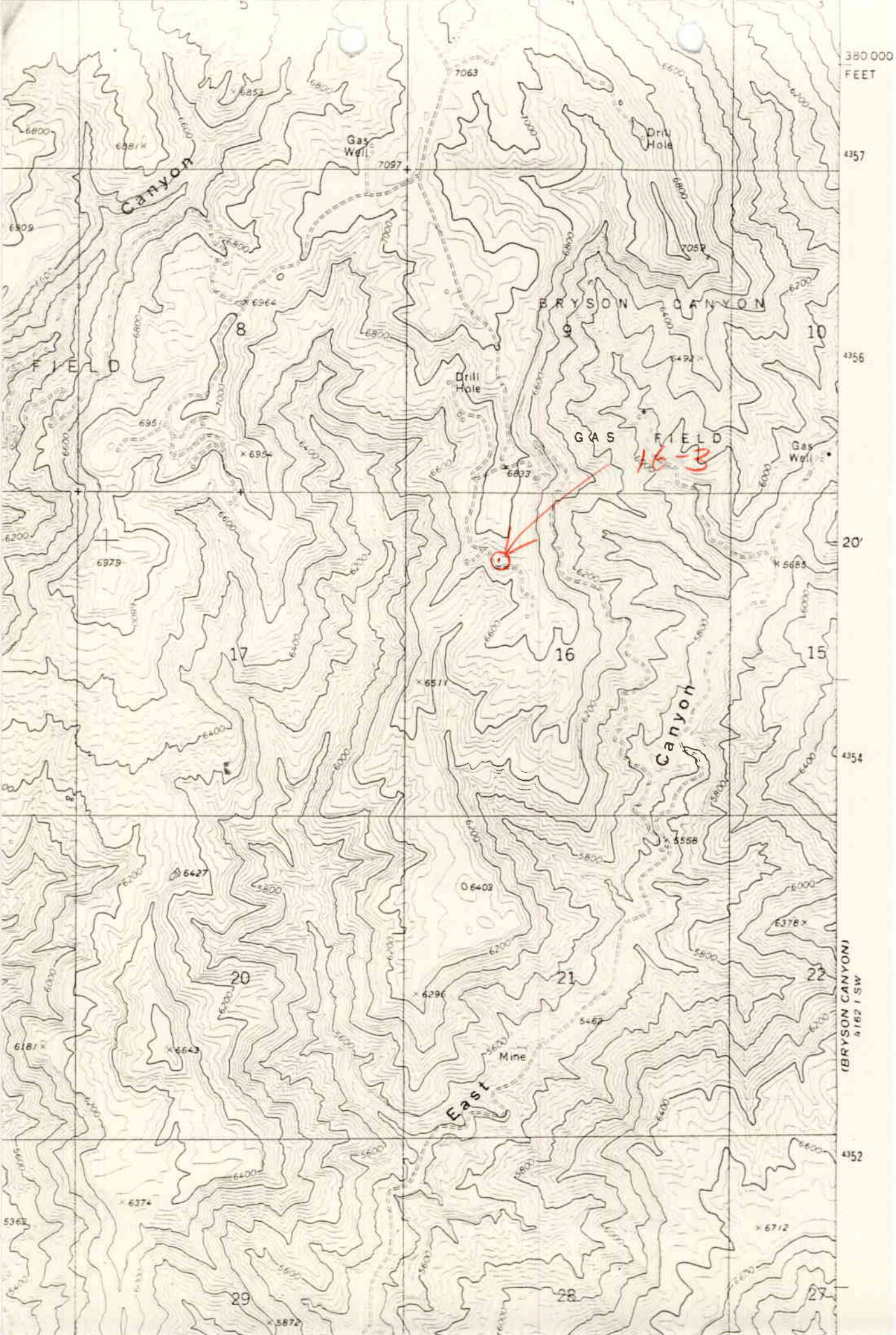
SURVEYOR'S CERTIFICATE

I, Edward A. Armstrong, a registered land surveyor in the State of Utah do hereby certify that this survey was made under my direct supervision and that this plat represents said survey

Edward A. Armstrong

EDWARD A. ARMSTRONG P.E. & L.S. 4464

	ARMSTRONG ENGINEERS and ASSOCIATES, INC.	
	GENERAL ENGINEERING, SURVEYING, SOILS AND CONCRETE TESTING	
	1000 WEST 1000 NORTH, SALT LAKE CITY, UTAH 84119	
	1" = 1000'	TENNECO OIL
	10/16/80	TENNECO DOUGHERTY STATE 16-3
MEL		
EAA		
10/6/80	SHEET 1 of 2	JOB NUMBER 803050



TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

DRILLING PROCEDURE

DATE: December 4, 1980

LEASE: Tenneco Dougherty State

WELL NO.: 16-3

LOCATION: 1053.4 FNL, 1565.1 FWL
Section 16, T17S, R24E
Grand County, Utah

FIELD: Bryson Canyon

ELEVATION: 6713' G.L.

TOTAL DEPTH: 6060'

PROJECTED HORIZON: Entrada

SUBMITTED BY: Tom Dunning DATE: December 4, 1980

APPROVED BY:  DATE: 12/4/80

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

Wasatch		
Mesaverde	Surface	
Mancos	1300'	
Castlegate	1650'	Water
Mancos B	2303'	Gas
Dakota Silt	5165'	Gas
Morrison	5414'	Gas
Salt Wash	5720'	Gas
Entrada	6030'	Gas
TD	6060'	

1. No abnormal pressures, temperatures or H_2S is anticipated on this hole.
2. Reserve pit shall be fenced on 3 sides during drilling operations in order to comply with BLM and USGS regulations.

DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Set 1-3 joints of 9 5/8" casing as needed to be used as conductor pipe.
3. Install casing head and nipple up rotating head and blooie line.
4. Drill 8 3/4" hole to 1850' or 200 feet into the Castlegate Formation.
5. Log well as per G.E. department recommendations.
6. Run 7", 23#, K-55, ST&C surface casing to T.D. Cement with sufficient volume to circulate cement to the surface.
7. WOC. Nipple up casing spool, BOP's rotating head, choke manifold, etc. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes.
8. TIH and displace water in casing with air. Drill out shoe and dry up hole.
9. Drill 6 1/4" hole to T.D.
10. Log well as per G.E. department recommendations.
11. If well is productive, run 4 1/2", 10.5#, K-55, ST&C casing to T.D. Cement with sufficient volume to cover all possible productive zones.
12. If the well is non-productive, P & A as per Regulatory Agency Specifications.

CASING PROGRAM

CONDUCTOR:	30' to 125' as needed 9 5/8", 36#, K-55, ST&C.
SURFACE:	1850' 7", 23#, K-55, ST&C.
PRODUCTION:	6060' 4 1/2", 10.5#, K-55, ST&C.

MUD PROGRAM

0-125' Spud mud. Viscosity as needed to clean hole.
125-1850' Air or Air/Mist.
1850-6060' Air or Air/Mist.

NOTE: Should the hole become wet or encounter large gas flows which require mud up, keep the weight as low as possible, vis as needed, and W.L. + 6 cc.

EVALUATION

Cores and DST's:

None.

Deviation Surveys:

0-125' Every 100' unless hole conditions prohibit running the surveys. Maximum deviation at T.D. 1° .
125-1850' Every 500' or on trips. Maximum deviation 1° per 100' or 2° at TD.
1850-6060' Every 500' or on trips. Maximum deviation 1° per 100' or 5° at TD.

Samples:

None.

Logs:

Surface Hole - as specified by G.E. Department.

Production Hole - as specified by G.E. Department.

BLOWOUT EQUIPMENT

1. Double ram hydraulic with pipe and blind rams operated by an accumulator.
2. Rotating head on air or air/mist holes.
3. Preventors must be checked for operation every 24 hours. This check must be recorded on the IADC Drilling Report Sheet.

REPORTS

Drilling Reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, daily and cumulative mud cost, deviation surveys, and other pertinent information to be called into Division Office by 7:30 A.M. Monday thru Friday.

TENNECO OIL COMPANY
P.O. BOX 3249
ENGLEWOOD, COLORADO 80155
PHONE: 303-740-4800

Office Directory

Don S. Barnes	740-4814
John W. Owen	740-4810
Tom Dunning	740-4813
Jack Magill	740-4802
Dale Kardash	740-4809

In case of emergency or after hours call the following in the preferred order.

- | | | | |
|-----|-----------------------------|----------|--------|
| (1) | Don S. Barnes | 740-4814 | Office |
| | Division Drilling Engineer | 936-0704 | Home |
| (2) | John W. Owen | 740-4810 | Office |
| | Project Drilling Engineer | 795-0221 | Home |
| (3) | Mike Lacey | 797-2651 | Home |
| | Division Production Manager | | |

1/2 on unit

** FILE NOTATIONS **

DATE: Aug. 13, 1981
OPERATOR: Genneco Oil Co.
WELL NO: Dougherty State #16-3
Location: Sec. 16 T. 17S R. 24E County: Grand

File Prepared: ☒ Entered on N.I.D: ☒
Card Indexed: ☒ Completion Sheet: ☒

API Number 43-019-30840

CHECKED BY:

Petroleum Engineer: _____

Director: Unit Well

Administrative Aide: ~~as a sub-unit~~ Unit Well,
ok on boundaries.

APPROVAL LETTER:

Bond Required: ☐ Survey Plat Required: ☐

Order No. _____ O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage
within a 660' radius of proposed site ☐

Lease Designation ☒ Plotted on Map ☐

Approval Letter Written ☐

Hot Line ☐ P.I. ☐

August 14, 1981

Tenneco Oil Company
P. O. Box 3249
Englewood, Colo. 80155

RE: Well No. Dougherty State #16-3,
Sec. 16, T. 17S, R. 24E,
Grand County, Utah

Insofar as this office is concerned approval to drill the above referred to gas well is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953: and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30840.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Cleon B. Feight
Director

CBF/db
CC: State Lands

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Tenneco

WELL NAME: Dougherty State 16-3

SECTION NENW 16 TOWNSHIP 17S RANGE 24E COUNTY Grand

DRILLING CONTRACTOR Brinkerhoff Signal

RIG # 9

SPUDED: DATE 11-24-81

TIME 7:00 PM

How Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Gary Clark

TELEPHONE # (303) 858-9826

DATE November 25, 1981 SIGNED AS

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Tennaco Oil Company Tom Dunning 303-740-4813

WELL NAME: Dougherty State 16-3

SECTION 16 TOWNSHIP 17S RANGE 24E COUNTY Grand

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 5600'

CASING PROGRAM:

9 5/8" @ 80' cemented to surf.

7" @ 1900' cemented to surf.

6 1/4" openhole TD

FORMATION TOPS:

Mesaverde	surface
Mancos	1338'
Castlegate	1688'
Mancos B.	2431'
Dakota Silt	5203'
Morrison	5452' - TD

Water at 5420', SSG at 3200', no DST's or cores.

PLUGS SET AS FOLLOWS:

1. 5250' - 5100'
2. 3300' - 3100'
3. 2000' - 1800'
4. 50' - surf.

The interval between plugs shall be filled with a 9.2#, 50 vis. fresh water gel based mud; erect regulation dryhole marker; clean up, grade and restore the location; and notify this Division when the location is prepared for inspection.

DATE December 3, 1981

SIGNED

MTM

M. J. Minder

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. ML-3323	
2. NAME OF OPERATOR Tenneco Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR P.O. Box 3249, Englewood, CO 80155		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1053' FNL, 1565' FWL		8. FARM OR LEASE NAME Dougherty State	
14. PERMIT NO. --		9. WELL NO. 16-3	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6713' gr.		10. FIELD AND POOL, OR WILDCAT Bryson Canyon Unit	
		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 16, T17S, R24E	
		12. COUNTY OR PARISH Grand	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

11/24/81 - MIRURT. Spud well w/Brinkerhoff Signal #9.

11/27/81 - Run 53 jts. 7" csg. 23# K-55 @ 2045'. Cmt. w/345 sxs 50/50 POZ, 2% CACL and 1/4# celloflake. Tail w/100 sx CL-G w/2% CACL. Pmp in Annulus w/105 sx CL-G & 2% CACL. Cmt. circ. to cover productive zones.

12/4/81 - Set plug #1, 5450'-5150', 80 sx CL-G
Set plug #2, 3300'-3100', 60 sx CL-G
Set plug #3, 2145'-1945', 60 sx CL-G
Set plug #4, 50'-0', 10 sx CL-G
Rig release 9:00 P.M., 12/4/81.

18. I hereby certify that the foregoing is true and correct

SIGNED

Laundra Person

TITLE Production Analyst

DATE 12/15/81

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

SUBMIT IN DUPLICATE*

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

(See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐
b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESV. ☐

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements)*

At surface 105.34' FNL 1565.1' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

43-019-30840 8-14-81

15. DATE SPUDDED 11/24/81 16. DATE T.D. REACHED 12/3/81 17. DATE COMPL. (Ready to prod.) P & A'd 12/4/81 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6713' gr 19. ELEV. CASINGHEAD -

20. TOTAL DEPTH, MD & TVD 5600' 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 0' - TD 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN

27. WAS WELL CORED
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	23#	2045'	8-3/4"	345sx 50:50 POZ, 2% CACL & 1/4# sx celloflake, 100sx Cl-G w/2% CACL	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Saundria Peron TITLE Production Analyst DATE 12/8/81

*(See Instructions and Spaces for Additional Data on Reverse Side)



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 26, 1985

Tenneco Oil Company
P.O. Box 3249
Englewood, Colorado 80155

Gentlemen:

Re: Well No. Dougherty State 16-3 - Sec. 16, T. 17S., R. 24E.,
Grand County, Utah - API #43-019-30840

This letter is to advise you that Sec. 38, Geologic Markers, on the back side of the "Well Completion or Recompletion Report and Log" for the above referenced well was not filled in when this report was submitted.

We are sure this was an oversight on your part and we request that you complete the enclosed Form OGC-3 and forward it to this office as soon as possible, but not later than December 10, 1985.

Sincerely,

Pam Kenna
Well Records Specialist

Enclosure

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza

FILE

0170S/15